

Fresh Foods from Farm-to-Table: Teacher's Guide

Welcome to your “Fresh Foods from Farm-to-Table” interactive classroom presentation. This presentation was created with Power Point so that it can be used in a variety of classrooms. If you are using a laptop with an LCD projector, simply progress through the Power Point by clicking to advance. All of the interactive aspects of the presentation are set to occur on click. The corresponding videos and websites are embedded in the page. Simply hover over the video window to reveal the “play arrow” at the bottom.

If you are using an interactive white board, simply tap on each slide with your finger or stylus to activate the interactive aspects of the presentation. It does not matter where you tap, but you can make it appear as if you are making certain things happen by tapping them.

The notes at the bottom of each slide will help you navigate the presentation and give you tips and ideas for best integrating it within your classroom.

Lesson Overview

In this lesson, students explore the concept of farm-to-table. In the beginning of the lesson, students enjoy acting out verbs that they will later discover to be the steps of the farm-to-table process for eggs. Students will draw on their background knowledge to formulate questions that guide their learning. Then, using online resources, students will explore and take note of the various phases of the production process. Students will also have the opportunity to take an interactive exploration of the farm to table process. Following this, students will connect what they have learned to egg production in their home state and compare the agriculture from their state to another of their choice. Finally, students will demonstrate their learning by sequencing and explaining what they have learned.

Objectives

After completing this lesson, students will be able to

- Identify and explain the steps that fresh foods, such as eggs, go through in the production

and delivery process from farm-to-table.

- Use varied online resources to discover facts about the production process of eggs.
- Compare agriculture in their state with other states.

In advance:

Supplies:

- Chart paper, markers, index cards
 - *Each card should have one of the 8 terms included in the process of the production and delivery process for a total of 8 cards.
- Computers for each student or pairs/groups of students

Handouts:

- Blank KWL (*included in teacher guide*)
- Egg Production student handout (*found at <http://www.incredibleegg.org/egg-facts/basic-egg-facts/egg-production/laying>*)
- State Agricultural handout/s (*found at www.agclassroom.org/kids/ag_facts.htm*)
- Blank Sorting Organizer (*included in teacher guide*)

Procedure

Teacher note

This lesson is based on the 5 E instructional model. The 5 E model is based on the constructivist approach to learning, which says that learners build or construct new ideas on top of their old ideas. Each of the 5 E's describes a phase of learning, and each phase begins with the letter "E": Engage, Explore, Explain, Elaborate, and Evaluate. The 5 E model allows students and teachers to experience common activities, to use and build on prior knowledge and experience, to construct meaning, and to continually assess their understanding of a concept.

Slide 1

Title Screen



Slide 2



ENGAGE

- Randomly group students into eight groups for the opening activity.
- Show them the slide and ask them to read aloud the question at the top of the slide.
- Explain that today they will be learning more about how a food that many people eat for breakfast gets from a farm to their table. **Don't tell them which food it is just yet.**

- **Note:** Before moving to the next slide, distribute one index card to each group.

The cards should each have one of the following terms written on them:

- Collecting
- Washing
- Grading
- Sorting
- Packaging
- Shipping
- Selling
- Enjoying

Slide 3



- Show students the words on the slide and explain that each of their groups has one of the words written on it.
- Give student groups a few minutes to read the word on their cards and come up with a way that they could act out their word so that their classmates can guess which word it is. (Younger students might need pictures on their cards.)

- Invite students, one group at a time, to come to the front of the room and act out their words. Allow other students to guess what word is on the card. If students cannot guess after a few minutes, allow the groups to share the words on their cards.

Slide 4

the water Project education station

Each group should **arrange the terms** in the correct order using paper and pencil.

The group who completes it **correctly the quickest** will come to the board to arrange the terms.

Grade Sort Ship Collect

Wash Enjoy Package Sell

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- After all groups have acted out their words, invite students to consider what all of the words have in common. If students have trouble answering, encourage them to think about breakfast foods. Then, explain that all of the words represent steps in the production and delivery of eggs. In other words, they show how an egg gets from the farm to the table.
- Refer student groups to the eight steps on the slide. Explain that the steps are out of order! Challenge groups to try to determine the correct order, from farm to table, of each step. Students can write down the words on a sheet of paper. Or, if you are using an interactive white board, they can place numbers by each step on the screen.

Slide 5



- Show students the correct order by showing the next slide. Congratulate groups that were able to put all of the steps in the correct order.

Slide 6

the Egg Project education station

Today we will learn to...

- **Identify** and **explain** the steps that fresh foods, such as eggs, go through in the production and delivery process from farm-to-table
- Use **online resources** to discover facts about the production process of eggs
- **Compare** agriculture in our state with other states

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Incredible Edible

Discovery

- Review each of the lesson objectives with students.

Slide 7

What I Know	What I Want to Learn	What I Have Learned
		

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- If students are unfamiliar, introduce them to the KWL chart and distribute the handout for student note taking.
- First, ask students to name anything they already **KNOW** about breakfast foods that come from the farm or the ways that those foods are produced and delivered. Chart the response in the KNOW column.
- Then, invite students to share questions they might **WANT** to learn about the process these foods take from farm to table. Chart the questions in the WANT column.
- Finally, explain that the LEARNED column will be completed at the end of the lesson.

(Note: You can have students do the KWL chart with the entire class or in small groups or pairs).

Slide 8

"Jill Benson: Take a Look at Our Egg Processing"

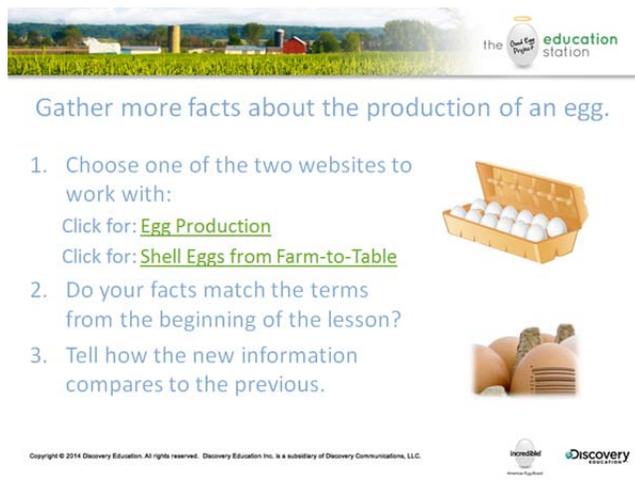
the Good Egg Project education station

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EXPLORE

- Distribute the note-taking handout to students.
- Explain that there are many different types of resources that we can use to help us research or learn new information. Today, that they will look at three different types of media to help them better understand the production process behind eggs. One will be a video of an egg processing plant. A second will be a website where they will research information. Finally, a third will be an interactive exploration where they will answer questions and digitally travel through the farm- to-table process.
- The first research tool will be the video in this slide. In this video, students will see how technology is used in a processing plant as eggs are washed, graded, weighed, inspected and packaged. Students will also see where eggs go after packaging. Hold your cursor over the video and hit the start button to begin playing. The video will play for 1:18.
- Encourage students to take notes about the key information they learn about the production process of eggs.

Slide 9



the  education station

Gather more facts about the production of an egg.

1. Choose one of the two websites to work with:
Click for: [Egg Production](http://www.incredibleegg.org/egg-facts/basic-egg-facts/egg-production/laying)
Click for: [Shell Eggs from Farm-to-Table](http://www.fsis.usda.gov/wps/portal/food-safety-education/get-answers/food-safety-fact-sheets/egg-products-preparation/shell-eggs-from-farm-to-table/CT_Index)
2. Do your facts match the terms from the beginning of the lesson?
3. Tell how the new information compares to the previous.



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- Encourage students to gather additional facts about the farm-to-table process using one of both of the two websites in this slide. They can link directly to the sites or they can use the URL's below.

Egg Production:

<http://www.incredibleegg.org/egg-facts/basic-egg-facts/egg-production/laying>

Shell Eggs from Farm to Table:

http://www.fsis.usda.gov/wps/portal/food-safety-education/get-answers/food-safety-fact-sheets/egg-products-preparation/shell-eggs-from-farm-to-table/CT_Index

Slide 10



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Take the Farm-to-Table Journey with Education Station!

START! →



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- Finally, students can explore the farm-to-table process using the interactive, “Take the Farm-to-Table Journey with Education Station.” They can link directly to the interactive from this slide.
- During this interactive, students can unlock the eight stages of the egg production process by answering eight questions correctly. When they enter the interactive, students will be asked to indicate their grade level so that age-appropriate questions will appear.
- Again, invite students to take notes about the process on the note-taking handout.

Slide 11



the egg project education station

1. Groups will begin at different stations and move to the **right** when the signal is given

2. Use your **marker** to write something you have learned about the term on the poster paper

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Horizon Discovery

EXPLAIN

- Using the set of index cards from the ENGAGE activity, glue each card onto a different piece of chart paper and hang the chart paper in different places around the room. Include a marker by each sheet of paper.
- Randomly break students into groups so that each piece of chart paper has a small group of students beside it.
- Explain to students that they will be doing a Carousel Brainstorming Activity where they will write what they learned at each step in the Farm-to-Table process and, at a set time, move to the next stage to add to what was written by another group about a different step. If possible, they should not repeat information. They can use the notes they have taken during their research to help them.
- Give students one to two minutes at each step to write down what they know and learned about that step in relation to the production process of an egg. (Younger students may need more time at each station.)

- When time is up, invite students to rotate clockwise with their markers to the next piece of chart paper and add anything they know about that step in a set time. (A bell or chime could be used to indicate time is up.) Continue to rotate students to help them summarize their learning.
- After all groups have rotated to each step, review the information on each sheet of chart paper.

Slide 12



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Which products are available in your state? Which products are available in a nearby state?

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ELABORATE

- Distribute the Venn diagram activity sheet.
- Now that students have learned about the farm-to-table process, they can explore which products are available locally in their own states.
- Show students the map on this slide, and ask them to find their home state.
- Then, click on the link embedded in the map on the PowerPoint or go to www.agclassroom.org/kids/ag_facts.htm to given them time to explore the state agriculture facts.
- Ask students to choose a state other than their own and to use the Venn diagram to compare and contrast agriculture facts about their own state to another state.
- Invite students to present what they've learned.

Slide 13



EVALUATE

- Finally, show the image on the slide and challenge students to identify, sequence, and explain the steps of the production process from farm-to-table. (*Younger students may need to draw or use pre-written cards for their answers.*) They can chart the answers in the “L” section of the KWL chart they used earlier in the lesson.

Sources

- “Jill Benson: Take a Look at Our Egg Processing Plant” at <http://educationstation.discoveryeducation.com>
- Egg Production <http://www.incredibleegg.org/egg-facts/basic-egg-facts/egg-production/laying>
- Shell Eggs from Farm to Table http://www.fsis.usda.gov/wps/portal/fsis/topics/food-safety-education/get-answers/food-safety-fact-sheets/egg-products-preparation/shell-eggs-from-farm-to-table/CT_Index
- State Agriculture Facts http://www.agclassroom.org/kids/ag_facts.htm
- “Farm –to-Table Journey with Education Station” <http://educationstation.discoveryeducation.com>

Content Standards:

National Science Education Standards: Science in Personal and Social Perspectives, Content Standard F, Grades K-4: Personal Health. Nutrition is essential to health. Students should understand how the body uses food and how various foods contribute to health. Recommendations for good nutrition include eating a variety of foods, eating less sugar, and eating less fat.

National Science Education Standards: Science in Personal and Social Perspectives, Content Standard F, Grades 5-8: Personal Health. Food provides energy and nutrients for growth and development. Nutrition requirements vary with body weight, age, sex, activity and body functioning.

SORTING ORGANIZER

First:



Next:



Then:



Then:



Then:



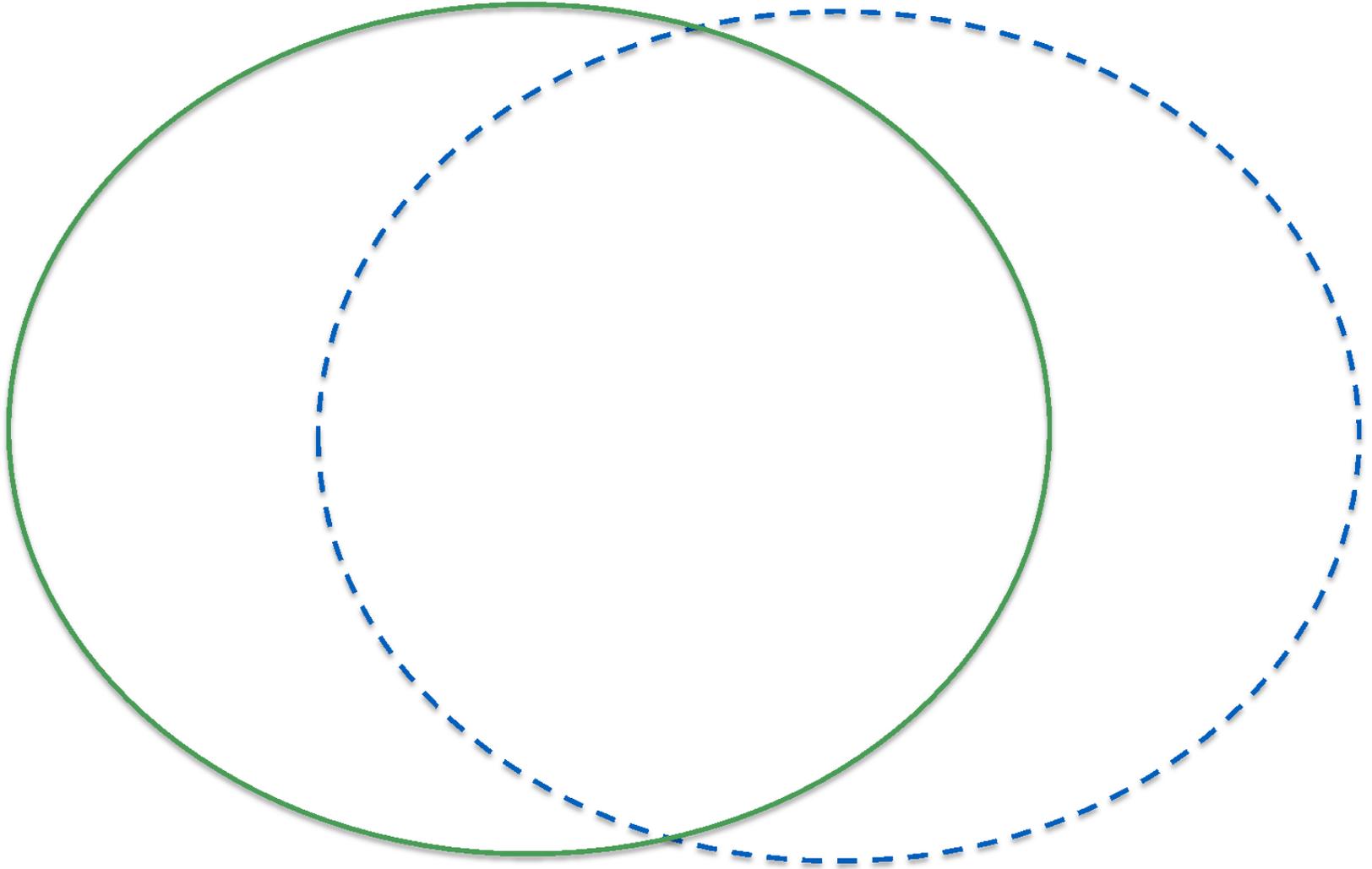
Finally:



VENN DIAGRAM

State #1

State #2



KWL Chart

What I KNOW	What I WANT to Learn	What I Have Learned